UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,261	03/22/2004	Kenneth Priddy	200314321-1	1933

22879 7590 03/19/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400	**EXAMINER** RIAD, AMINE

ART UNIT	PAPER NUMBER
2113	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/806,261	PRIDDY, KENNETH
	Examiner	Art Unit
	Amine Riad	2113

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>22 March 2004</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-12</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-12</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>22 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Detailed Action

Claims 1-14 have been presented for examination.

Claims 1-14 have been rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kelkar

U.S. Patent 7,058,846.

In regard to claims 1 and 7

Kelkar discloses a computer cluster comprising:

storage media; (Figure 1; item 140)

a first computer having a first instance of an application program installed, said

application program having instructions, (Figure 2; item 110A)

said first computer including,

volatile memory; (Figure 7;item 717)

processing means (Figure 7;item 714)

for executing instructions of said first instance of said application program so as to

modify data stored in said memory, (Column 5; lines 8-9)

for creating a snapshot of said data while said first instance of said application program

is running, said snapshot being stored in said volatile memory,(Column 3; lines 40-44)

and for transferring said snapshot from said volatile memory to said storage media while

said first instance of said first instance of said application program is running, and

(Column 3; lines 40-40 "services that allow configuration changes to be made

dynamically to storage resources")

a second computer having a second instance of said application program installed,

(Figure 2; item 110b) said second computer including means for accessing said storage

media so that said second instance of said application can access said snapshot as

stored on said storage media (Figure 2 ; item 110b).

In regard to claim 2

A computer cluster as recited in Claim 1 wherein said processing means includes

a data processor (Figure 7; item 714)

for executing instructions of said first instance of said application program so as to

modify data stored in said memory, and (Column 3; lines 36-37 "a clustering

environment in which storage configuration changes can be made dynamically"

[dynamic change entails modified stored data])

for creating said snapshot of said data while said first instance of said application

program is running,(Column 3; line 43) said snapshot being stored in said volatile

memory (Figure 1; item 140d), and a transfer processor for transferring said snapshot

from said volatile memory to said storage media while said first instance of said first

instance of said application program is running. (Figure 1; 102 a)

In regard to claim 3,

Kelkar discloses a computer cluster as recited in Claim 1 further comprising a first

cluster daemon running on said first computer for causing said snapshot to be created. (Column 3; lines 39-40 "These operations include storage management services that allow configuration changes to be made dynamically" [Examiner considers management services as a daemon])

In regard to claim 4

Kelkar discloses a computer cluster as recited in Claim 1 further a second cluster daemon running on said second computer, said second cluster daemon providing: for detecting a failure that prevents said first instance of said application program from running on said first computer (Column 5; lines 26-28), said failure detector, and for causing, in response to said detecting a failure, said second computer to process said snapshot in accordance with instructions of said second instance of said application program. (Abstract; "If a node that has made a resource configuration fails, the resource configuration change is available for use by other nodes in the set, each of which can resume operations of the failed node")

In regard to claim 5

Kelkar discloses a computer cluster as recited in Claim 1 wherein said processing means provides for, in response to a write access of a section of said volatile memory in accordance with instructions of said first instance of said application program, copying data in that section so that one instance of said data originally in that section is modified and the other copy of data originally in that section is not modified. (Column 3; line 41 [Kelkar discloses changes are made dynamically to storage resources this that while the write process is made to the memory by the processor only the new data involved in the

transaction is made available to the storage because it is dynamic])

In regard to claims 6 and 12

Kelkar discloses a computer cluster as recited in Claim 2 wherein said data processing

means maintains state data, said snapshot data including at least some of said state

data. (Column 3; line 44)

In regard to claim 8

Kelkar discloses a method as recited in Claim 7 further comprising executing a second

instance of said application program on a second computer of said computer cluster

using said snapshot as a starting state. (Abstract; "If a node that has made a

resource configuration fails, the resource configuration change is available for use

by other nodes in the set, each of which can resume operations of the failed

node")

In regard to claim 9

Kelkar discloses a method as recited in Claim 8 further comprising detecting a failure

that prevents execution of said first instance of said application program, said detecting

occurring after said transferring and before said executing a second instance. (Column

5; lines 26-28)

In regard to claim 10

Kelkar discloses a method as recited in Claim 8 wherein said executing a second

instance follows said transferring without an intervening detection of a failure. (Column

4; lines 53-56 "To make resources configuration available to another node that can

resume operation of node 110a **upon failure**, the invention synchronizes resources

configuration data")

In regard to claim 11

Kelkar discloses a method as recited in Claim 7 wherein said transferring is effected by

a data transfer processor not used in executing said first instance of said application.

(Figure 3; items 330a and 330b)

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. U.S. Patent 6,266,781 covers most of the limitations, but lacks a

clear illustration of computer 1 and computer 2. U.S. Patent 6,957,251 talks about fail-

over, but does not mention a snapshot see PTO 892.Any inquiry concerning this

communication or earlier communications from the examiner should be directed to

Amine Riad whose telephone number is 571-272-8185. The examiner can normally be

reached on 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on 571-272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-

273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AR
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3/10/07

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